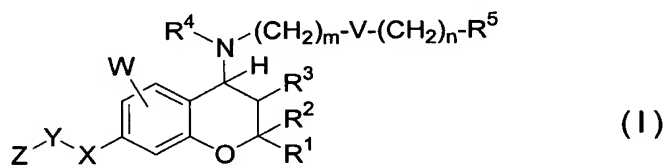


**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A benzopyran compound of formula (I)



or a pharmaceutically acceptable salt thereof,

wherein

X is  $\text{NR}^6$  wherein  $\text{R}^6$  is hydrogen atom or  $\text{C}_{1-4}$  alkyl group;

Y is a bond, SO or  $\text{SO}_2$ ;

Z is  $\text{C}_{1-4}$  alkyl group (wherein the  $\text{C}_{1-4}$  alkyl group may be arbitrarily substituted with 1 to 5 halogen atoms or phenyl group (wherein the phenyl group may be arbitrarily substituted with  $\text{C}_{1-4}$  alkyl group)) or phenyl group (wherein the phenyl group may be arbitrarily substituted with  $\text{C}_{1-4}$  alkyl group);

W is hydrogen atom, hydroxy group,  $\text{C}_{1-6}$  alkoxy group (wherein the  $\text{C}_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom), halogen atom,  $\text{C}_{1-4}$  alkyl group or  $\text{C}_{1-6}$  alkylsulfonylamino group;

$\text{R}^1$  and  $\text{R}^2$  are independently of each other  $\text{C}_{1-3}$  alkyl group (wherein the  $\text{C}_{1-3}$  alkyl group may be arbitrarily substituted with hydroxy group, methoxy group, halogen atom or trifluoromethoxy group);

$\text{R}^3$  is hydrogen atom, hydroxy group or methoxy group;

m is an integer of 0 to 4;

n is an integer of 0 to 4;

V is a single bond,  $CR^7R^8$  wherein  $R^7$  is

-  $C_{1-6}$  alkyl group (wherein the  $C_{1-6}$  alkyl group may be arbitrarily substituted with halogen atom, hydroxy group,  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom),  $C_{6-14}$  aryl group or  $C_{2-9}$  heteroaryl group (wherein each of the  $C_{6-14}$  aryl group or  $C_{2-9}$  heteroaryl group may be arbitrarily substituted with 1 to 3  $R^{10}$  wherein  $R^{10}$  is halogen atom; hydroxy group;  $C_{1-6}$  alkyl group (wherein the  $C_{1-6}$  alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom)));  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom); nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group;  $C_{1-6}$  alkylamino group; di- $C_{1-6}$  alkylamino group;  $C_{1-6}$  alkylcarbonylamino group;  $C_{1-6}$  alkylsulfonylamino group; aminocarbonyl group;  $C_{1-6}$  alkylaminocarbonyl group; di- $C_{1-6}$  alkylaminocarbonyl group;  $C_{1-6}$  alkylcarbonyl group;  $C_{1-6}$  alkoxycarbonyl group; aminosulfonyl group;  $C_{1-6}$  alkylsulfonyl group; carboxy group or  $C_{6-14}$  arylcarbonyl group, and when a plurality of  $R^{10}$  are present, they may be identical or different from each other (other)),

-  $C_{6-14}$  aryl group or  $C_{2-9}$  heteroaryl group (wherein each of the  $C_{6-14}$  aryl group or  $C_{2-9}$  heteroaryl group may be arbitrarily substituted with 1 to 3  $R^{10}$  wherein  $R^{10}$  has the above-mentioned meaning)) meaning);

- hydroxy group or

-  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom), and  $R^8$  is

- hydrogen atom,

-  $C_{1-6}$  alkyl group (wherein the  $C_{1-6}$  alkyl group may be arbitrarily substituted with halogen atom, hydroxy group,  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily

substituted with halogen atom)),

- C<sub>6-14</sub> aryl group or C<sub>2-9</sub> heteroaryl group (wherein each of the C<sub>6-14</sub> aryl group or C<sub>2-9</sub> heteroaryl group may be arbitrarily substituted with 1 to 3 R<sup>11</sup> wherein R<sup>11</sup> is halogen atom; hydroxy group; C<sub>1-6</sub> alkyl group (wherein the C<sub>1-6</sub> alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or C<sub>1-6</sub> alkoxy group (wherein the C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen atom)); C<sub>1-6</sub> alkoxy group (wherein the C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen atom); nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group; C<sub>1-6</sub> alkylamino group; di-C<sub>1-6</sub> alkylamino group; C<sub>1-6</sub> alkylcarbonylamino group; C<sub>1-6</sub> alkylsulfonylamino group; aminocarbonyl group; C<sub>1-6</sub> alkylaminocarbonyl group; di-C<sub>1-6</sub> alkylaminocarbonyl group; C<sub>1-6</sub> alkylcarbonyl group; C<sub>1-6</sub> alkoxycarbonyl group; aminosulfonyl group; C<sub>1-6</sub> alkylsulfonyl group; carboxy group or C<sub>6-14</sub> arylcarbonyl group, and when a plurality of R<sup>11</sup> are present, they may be identical or different from each other),

- hydroxy group or

- C<sub>1-6</sub> alkoxy group (wherein the C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen atom), or R<sup>7</sup> together with R<sup>8</sup> may represent O or S, or

V is NR<sup>9</sup> wherein R<sup>9</sup> is hydrogen or C<sub>1-6</sub> alkyl group (wherein the C<sub>1-6</sub> alkyl group may be arbitrarily substituted with halogen atom, C<sub>1-6</sub> alkoxy group (wherein the C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen atom), hydroxy group, C<sub>6-14</sub> aryl group or C<sub>2-9</sub> heteroaryl group (wherein each of the C<sub>6-14</sub> aryl group or C<sub>2-9</sub> heteroaryl group may be arbitrarily substituted with 1 to 3 R<sup>11</sup> wherein R<sup>11</sup> has the above-mentioned meaning)); or O, S, SO or SO<sub>2</sub>;

R<sup>4</sup> is hydrogen or C<sub>1-6</sub> alkyl group (wherein the C<sub>1-6</sub> alkyl group may be arbitrarily substituted with halogen atom, C<sub>1-6</sub> alkoxy group (wherein the C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen atom), or hydroxy group); and

$R^5$  is

- hydrogen atom,
- $C_{1-6}$  alkyl group (wherein the  $C_{1-6}$  alkyl group may be arbitrarily substituted with halogen atom,  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom), amino group, carboxy group or hydroxy group),
- $C_{3-8}$  cycloalkyl group or  $C_{3-8}$  cycloalkenyl group (wherein the  $C_{3-8}$  cycloalkyl group or  $C_{3-8}$  cycloalkenyl group may be arbitrarily substituted with halogen atom,  $C_{1-6}$  alkyl group (wherein the  $C_{1-6}$  alkyl group may be arbitrarily substituted with halogen atom,  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom), amino group, carboxy group or hydroxy group),  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom), amino, carboxy group or hydroxy group), or
- $C_{6-14}$  aryl group or  $C_{2-9}$  heteroaryl group (wherein each of the  $C_{6-14}$  aryl group or  $C_{2-9}$  heteroaryl group may be arbitrarily substituted with 1 to 3  $R^{12}$  wherein  $R^{12}$  is halogen atom; hydroxy group;  $C_{1-6}$  alkyl group (wherein the  $C_{1-6}$  alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom));  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom); nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group;  $C_{1-6}$  alkylamino group; di- $C_{1-6}$  alkylamino group;  $C_{1-6}$  alkylcarbonylamino group;  $C_{1-6}$  alkylsulfonylamino group; aminocarbonyl group;  $C_{1-6}$  alkylaminocarbonyl group; di- $C_{1-6}$  alkylaminocarbonyl group;  $C_{1-6}$  alkylcarbonyl group;  $C_{1-6}$  alkoxycarbonyl group; aminosulfonyl group;  $C_{1-6}$  alkylsulfonyl group; carboxy group,  $C_{6-14}$  arylcarbonyl group, ureido group,  $C_{1-6}$  alkylureilene group,  $C_{6-14}$  aryl  $C_{1-6}$  alkylamino group,  $C_{1-6}$  alkoxycarbonylamino group,  $C_{6-14}$  aryloxy group

or C<sub>6-14</sub> arylcarbonylamino group, when a plurality of R<sup>12</sup> are present, they may be identical or different from each other).

2. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein both R<sup>1</sup> and R<sup>2</sup> are methyl group, R<sup>3</sup> is hydroxy group, and V is a single bond.

3. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein both R<sup>1</sup> and R<sup>2</sup> are methyl group, R<sup>3</sup> is hydroxy group, and V is CR<sup>7</sup>R<sup>8</sup>.

4. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein both R<sup>1</sup> and R<sup>2</sup> are methyl group, R<sup>3</sup> is hydroxy group, and V is NR<sup>9</sup>.

5. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 2, wherein R<sup>5</sup> is C<sub>1-6</sub> alkyl group, C<sub>3-8</sub> cycloalkyl group or C<sub>6-14</sub> aryl group.

6. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 3, wherein R<sup>5</sup> is C<sub>1-6</sub> alkyl group, C<sub>3-8</sub> cycloalkyl group or C<sub>6-14</sub> aryl group.

7. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 4, wherein R<sup>5</sup> is C<sub>1-6</sub> alkyl group, C<sub>3-8</sub> cycloalkyl group or C<sub>6-14</sub> aryl group.

8. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 5, wherein W is hydrogen atom, hydroxy group, methoxy group, chlorine atom, bromine atom, methyl group, ethyl group or methylsulfonylamino group.

9. (Previously Presented) The benzopyran compound or a pharmaceutically

acceptable salt thereof according to claim 6, wherein W is hydrogen atom, hydroxy group, methoxy group, chlorine atom, bromine atom, methyl group, ethyl group or methylsulfonylamino group.

10. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 8, wherein  $R^5$  is  $C_{1-6}$  alkyl group or  $C_{6-14}$  aryl group,  $R^6$  is hydrogen atom or methyl group, Y is  $SO_2$ , and Z is  $C_{1-4}$  alkyl group.

11. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 8, wherein  $R^5$  is  $C_{1-6}$  alkyl group or  $C_{6-14}$  aryl,  $R^6$  is hydrogen atom or methyl group, Y is a bond, and Z is  $C_{1-4}$  alkyl group.

12. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-6-methoxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl}-methanesulfonamide or a pharmaceutically acceptable salt thereof.

13. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3,6-dihydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl}methanesulfonamide or a pharmaceutically acceptable salt thereof.

14. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-6-methoxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl}-N-methylmethanesulfonamide or a pharmaceutically acceptable salt thereof.

15. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -4-[(2-cyclohexylethyl)amino]-3-hydroxy-6-methoxy-2,2-dimethyl-3,4-dihydro-2H-1-benzopyran-7-yl}methanesulfonamide or a pharmaceutically acceptable salt thereof.

16. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-6-methoxy-2,2-dimethyl-4-(pentylamino)-3,4-dihydro-2H-1-benzopyran-7-yl}methanesulfonamide or a pharmaceutically acceptable salt thereof.

17. (Previously Presented) A benzopyran compound which is N-((3*R*\*, 4*S*\*)-3-hydroxy-2,2,8-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl)methanesulfonamide or a pharmaceutically acceptable salt thereof.
18. (Previously Presented) A benzopyran compound which is N-((3*R*\*, 4*S*\*)-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl)methanesulfonamide or a pharmaceutically acceptable salt thereof.
19. (Previously Presented) A benzopyran compound which is N-((3*R*\*, 4*S*\*)-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl)ethanesulfonamide or a pharmaceutically acceptable salt thereof.
20. (Previously Presented) A benzopyran compound which is 1,1,1-trifluoro-N-((3*R*\*, 4*S*\*)-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl)methanesulfonamide or a pharmaceutically acceptable salt thereof.
21. (Previously Presented) A benzopyran compound which is N-((3*R*\*, 4*S*\*)-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl)-N-methylmethanesulfonamide or a pharmaceutically acceptable salt thereof.
22. (Previously Presented) A benzopyran compound which is N-((3*R*\*, 4*S*\*)-6-bromo-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl)methanesulfonamide or a pharmaceutically acceptable salt thereof.
23. (Previously Presented) A benzopyran compound which is ((3*R*\*, 4*S*\*)-2,2-dimethyl-7-dimethylamino-4-[(2-phenylethyl)amino]-3-chroman-6-yl)methanesulfonamide or a pharmaceutically acceptable salt thereof.
24. (Previously Presented) A benzopyran compound which is ((3*R*\*, 4*S*\*)-2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chroman-6-yl)methanesulfonamide or a pharmaceutically acceptable salt thereof.

25. (Previously Presented) A benzopyran compound which is (3*R*\*, 4*S*\*)-4-{[2-(4-fluorophenyl)ethyl]amino}-2,2-dimethyl-7-dimethylamino-3-chromanol or a pharmaceutically acceptable salt thereof.

26. (Previously Presented) A benzopyran compound which is (3*R*\*, 4*S*\*)-6-methoxy-2,2-dimethyl-7-dimethylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.

27. (Previously Presented) A benzopyran compound which is (3*R*\*, 4*S*\*)-6-methoxy-2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.

28. (Previously Presented) A benzopyran compound which is N-{(3*R*\*, 4*S*\*)-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-4-methylbenzenesulfonamide or a pharmaceutically acceptable salt thereof.

29. (Previously Presented) A benzopyran compound which is N-{(3*R*\*, 4*S*\*)-3-hydroxy-2,2-dimethyl-6-[(methylsulfonyl)amino]-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-methanesulfonamide or a pharmaceutically acceptable salt thereof.

30. (Previously Presented) A benzopyran compound which is (3*R*\*, 4*S*\*)-2,2-dimethyl-7-methylethylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.

31. (Previously Presented) A benzopyran compound which is N-{(3*R*\*, 4*S*\*)-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-chromen-7-yl}-N-isopropylmethanesulfonamide or a pharmaceutically acceptable salt thereof.

32. (Previously Presented) A pharmaceutical comprising the benzopyran compound of claim 1 or pharmaceutically acceptable salt thereof as an active ingredient, and



a pharmaceutically acceptable excipient.

33. (Previously Presented) A pharmaceutical for treating arrhythmia comprising the benzopyran compound of claim 1 or pharmaceutically acceptable salt thereof as an active ingredient, and a pharmaceutically acceptable excipient.

34. (Previously Presented) The benzopyran compound of claim 18, wherein the pharmaceutically acceptable salt is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl} methanesulfonamide maleate.

35. (Previously Presented) The benzopyran compound of claim 19, wherein the pharmaceutically acceptable salt is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl} ethanesulfonamide hydrochloride.

36. (Previously Presented) The benzopyran compound of claim 20, wherein the pharmaceutically acceptable salt is 1,1,1-trifluoro-N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-methanesulfonamide maleate.

37. (Previously Presented) The benzopyran compound of claim 21, wherein the pharmaceutically acceptable salt is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-N-methylmethanesulfonamide hydrochloride.

38. (Previously Presented) The benzopyran compound of claim 23, wherein the pharmaceutically acceptable salt is  $(3R^*, 4S^*)$ -2,2-dimethyl-7-dimethylamino-4-[(2-phenylethyl)amino]-3-chromanol hydrochloride.

39. (Previously Presented) The benzopyran compound of claim 24, wherein the pharmaceutically acceptable salt is  $(3R^*, 4S^*)$ -2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chromanol hydrochloride.

40. (Previously Presented) The benzopyran compound of claim 25, wherein the pharmaceutically acceptable salt is (3*R*\*, 4*S*\*)-4-[[2-(4-fluorophenyl)ethyl]amino]-2,2-dimethyl-7-dimethylamino-3-chromanol hydrochloride.

41. (Previously Presented) The benzopyran compound of claim 27, wherein the pharmaceutically acceptable salt is (3*R*\*, 4*S*\*)-6-methoxy-2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chromanol hydrochloride.

42. (Previously Presented) The benzopyran compound of claim 30, wherein the pharmaceutically acceptable salt is (3*R*\*, 4*S*\*)-2,2-dimethyl-7-methylethylamino-4-[(2-phenylethyl)amino]-3-chromanol hydrochloride.

43. (Previously Presented) The benzopyran compound of claim 31, wherein the pharmaceutically acceptable salt is (N-{(3*R*\*, 4*S*\*)-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-chromen-7-yl}-N-isopropylmethanesulfonamid hydrochloride.